

NOTES AND COMMENTS

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THE IDENTITY AND SYNONYMY OF *HYDROESSA FUSCA* GERMAR (VELIIDAE: HETEROPTERA)

Hydroessa fusca Germar (1838) has been an enigma in modern times, not recognized by any worker since Mayr (1868) who transferred it to the genus *Velia* Latreille without comment. In the Drake Collection (USNM) I found one female, with a Mayr determination label in his handwriting, collected during the Novara Expedition at the Cape of Good Hope, South Africa. This specimen belongs to the species currently known as *Ocellovelia germari* Distant, which must therefore fall as a junior synonym. In the discussion below I substantiate the synonymy.

Ocellovelia fusca Germar, New Combination

Hydroessa fusca Germar, 1838:123 (Location of types unknown.)

Velia fusca. Mayr, 1868:180.

Ocellovelia germari Distant, 1904:436 **NEW SYNONYMY**. (Type in BMNH.)

Discussion. The location or existence of Germar's types is unknown. Horn and Kahle (1935, p. 89) state that the Hemiptera part of his collection is in "Zool. Univ. Mus., Lemberg." Presumably Mayr saw Germar's types or at least knew the species, but unfortunately he gives no discussion. *Ocellovelia* and *Angilia* are the only two South African genera with general facies resembling *Velia* as construed at that time.

The description of *Hydroessa* (now *Microvelia* Westwood) *fusca* by Germar (1838) is very brief, however it contains several characters that provide clues as to its identity even without the determination of Mayr (1868): 1. Each elytra with a basal oblique white streak (the only ones visible in old or greasy specimens of *Ocellovelia germari* Distant), 2. The first two antennal segments basally light, distal two hairy, with dark hairs, 3. Head exserted, 4. Hemelytra a little shorter than abdomen, 4. Venter black, margins fuscous, 5. Legs pallid, knees darker, and 6. Twice the size of *Hydroessa reticulata* Burmeister.

The description matches specimens of *Ocellovelia germari* in the Polhemus Collection, with the exception of the rather rough size indication; however, all other veliids known to occur in the Cape region were also compared to test the possibility that Mayr made a mistake in his determination.

Character 6 immediately eliminates all African *Microvelia* species as they are all smaller or about the same size as *reticulata*, i.e., males 1.5 mm, females 1.6 mm. This character also eliminates *Rhagovelia* and *Angilia* species, all 4.8 mm or larger. All three of these genera match the description poorly in other respects as well. Other veliid species occurring in the Cape region belong to the genera *Ocellovelia* China & Usinger (3.7–4.2 mm), *Pseudovelia* Hoberlandt (2.5 mm), and *Xiphoveloidea* Hoberlandt (2.5 mm). As can be seen, the size of *fusca* given by Germar does not match

any of the latter three genera very closely so we must examine other characters for the latter two genera.

Pseudovelgia species agree in the following: Venter black with fuscous margins; first antennal segment basally pallid. They disagree in the following: Hemelytra with four (2 + 2) oblique diffuse sordid white streaks; head not exserted; distal antennal segments with light colored hairs; hemelytra longer than abdomen.

Xiphoveloidea species agree in the following: Hemelytra with oblique basal white streaks. They disagree in the following: Venter black, without fuscous margins; first antennal segment uniformly dark; head not exserted; distal antennal segments with light colored hairs; hemelytra longer than abdomen (macropterous form rare).

The possibility remains that *fusca* could be synonymous with *Ocellovelgia distanti* China and Usinger, but this species is rare, and is darker, which does not match Germar's description stating that *fusca* is dorsally fuscous.

The conclusion is that no other veliid matches the description of *fusca* as well as *Ocellovelgia germari* Distant, and this species is common in the Cape region; thus, Mayr's determination is supported, and *germari* must fall as a synonym.

Because no type-material of *Hydroessa fusca* Germar is known to exist, and in order to insure stability, I here designate a neotype, to be placed in the U.S. National Museum of Natural History, Washington, D.C. The neotype data is as follows: macropterous male, South Africa, Cape Province, Blinkwater Falls, Table Mt., Cape-town, XI-21-1949, B. Malkin.—*John T. Polhemus, University of Colorado Museum, 3115 South York St., Englewood, Colorado, USA 80110.*

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